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| Notice of Allowability | Application No. | Applicant(s) | |
| | 09/804,381 | KANG, SIN-GU | |
| | Examiner | Art Unit | |
| | Jennifer T. Nguyen | 2674 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed 02/02/05.
2. ☒ The allowed claim(s) is/are 1-6,8-11,13-15,17 and 20-25.
3. ☒ The drawings filed on 13 March 2001 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

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| <ol style="list-style-type: none"> 1. <input type="checkbox"/> Notice of References Cited (PTO-892) 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date <u>02/26/05</u> 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit of Biological Material | <ol style="list-style-type: none"> 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) 6. <input type="checkbox"/> Interview Summary (PTO-413), Paper No./Mail Date _____ 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment 8. <input type="checkbox"/> Examiner's Statement of Reasons for Allowance 9. <input type="checkbox"/> Other _____ |
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EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Hae-Chan Park on 6/30/05.

1. (Currently Amended) A driving module for applying a driving signal to a display cell circuit formed on a transparent substrate, the driving module comprising:
 - a flexible board;
 - a driving circuit mounted on the flexible board;
 - a driving signal line group which is in electrical communication with the driving circuit (5) and the display cell circuit so as to input/output the driving signal; and
 - inspecting patterns formed on the driving signal line group to inspect the condition of the driving signal line group and the driving signal,
- wherein the driving signal line group comprises a plurality of driving signal input lines which are formed on the flexible board to provide the driving signal to the driving circuit; a plurality of the driving signal bypass lines which are formed on the flexible board to provide the driving signal supplied from the driving circuit to a next driving circuit; and a plurality of driving signal output lines which are connected to the driving circuit to provide the driving signal supplied from the driving circuit to the display cell circuit,

wherein the inspecting patterns include a first inspecting pattern formed at the driving signal input line, and a second inspecting pattern formed at the driving signal bypass line, such that the first inspecting pattern is not electrically connected to the second inspecting pattern.

20. (Currently Amended) A display apparatus, comprising:

a transistor substrate;

integrated printed circuit board arranged adjacent to the transistor substrate;

a first driving module having a first end and a second end, the first end connected to the integrated print circuit board and the second end connected to the transistor substrate, wherein the first driving module includes a plurality of signal transmission line, and a second driving module having a first end and a second end, the first end connected to the transistor substrate, where the driving module comprises a plurality of input signal lines in electrical communication with the plurality of signal transmission lines, and a plurality of signal bypass lines which are formed on the flexible board to provide the driving signal supplied from the second driving module to a third driving module have a first end and second end, the first end connected to the transistor substrate, and a portion of the plurality of input signal lines and signal bypass lines includes inspecting patterns to allow for inspection of an electrical signal in plurality of input signal lines;

wherein the inspecting patterns include a first inspecting pattern formed at the driving signal input line, and a second inspecting pattern formed at the driving signal bypass line, such that the first inspecting pattern is not electrically connected to the second inspecting pattern.

2. REASONS FOR ALLOWANCE

Claims 1-6, 8-11, 13-15, 17, and 20-25 are allowable because the instant application is directed to a nonobvious improvement over the invention described in patent No. US 5,592,199 to Kawaguchi et al. The improvement comprises a plurality of the driving signal bypass lines which are formed on the flexible board to provide the driving signal supplied from the driving circuit to a next driving circuit; wherein the inspecting patterns include a first inspecting pattern formed at the driving signal input line, and a second inspecting pattern formed at the driving signal bypass line, such that the first inspecting pattern is not electrically connected to the second inspecting pattern. Kawaguchi teaches a probe terminal formed on the driving signal line group to inspect the condition of the driving signal line group and the driving signal (col. 22, lines 51-61). The patentable distinction is included in independent claims 1, 9, 20, and 21.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."


3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer T. Nguyen whose telephone number is 571-272-7696. The examiner can normally be reached on Mon-Fri: 9:00am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick N. Edouard can be reached on 571-272-7603. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2674

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jennifer Nguyen
06/30/05


REGINA LIANG
PRIMARY EXAMINER